(12) **Utility Model** **U1**

Description

Handwriting tester

State of the Art

Handwriting testers are generally known. They are used, for example, in banks for checking the signature for checks, money transfer forms and other documents. These handwriting testers function through optical systems. The test can first take place after the handwriting is already made and the document is manually or automatically placed in a separately arranged device. An instantaneous comparison of the handwriting made earlier with the present handwriting is not possible. The test takes place in two dimensions: length and width of the entire signature and the individual strokes, just as the ratios of height to width of the individual lines and letters to each other.

Problem

The objective of the invention reported in claim 1 is to make the components of the writing that are specific to the person and unchangeable and the force and pressure strokes that arise during writing three-dimensionally detectable, testable and immediately analyzable.

Invention

This problem is solved with the measures of claim 1 in that a plate is placed on balance cells or load cells or is provided with expansion strips such that the three-dimensional force and pressure strokes that arise during writing can be converted by the balance cells – load cells or by the strain measuring strips into processable electrical signals. Through downstream electronics, the signals can be transferred to data storage and can be compared at the next use. If the present signals correspond to the saved signals, then other functions can be rendered operative; if this is not the case, then functions can be locked.

Examples

The examples I to III make clear the function of the handwriting tester. In the first example, the plate (1) is placed on three balance cells – load cells (2). These sit on a solid foundation (6). If pressure is placed on the plate (1) from various directions (8), then this has a different intensity on the balance cells – load cells (2). The electrical signals that are proportional to the force and pressure that arise are conducted through cable connections (11) to the electronics for additional processing. The plate (1) is set in a covering (3) and can move freely in all directions. The covering (3) possesses two depressions (4) which stabilize the hand during writing. The handwriting sample (9) thus takes place approximately in the middle of the plate (1).

Example II shows the screen (5) built into the supporting frame (7). Below the supporting frame (7) are placed three balance cells – load cells (2). These are also set on the solid foundation (6). The whole item can be provided, as in example 1, with a covering (3).

Example III shows the plate (1) on whose underside are adhesively attached six expansion strips (10). The plate (1) is laid on supports (12). The force and pressure strokes (8) that are generated during writing bend the plate (1). These deflections are converted by the strain-measuring strips into proportional electrical signals and processed by an analysis device.

Reference number list

1	plate
2	balance cell/load cell
3	solid covering
4	depressions
5	screen
6	solid foundation
7	supporting frame
8	pressure strokes
9	handwriting sample
10	strain-measuring strips
11	cable connection

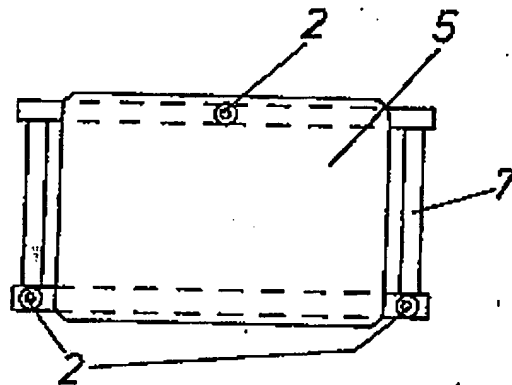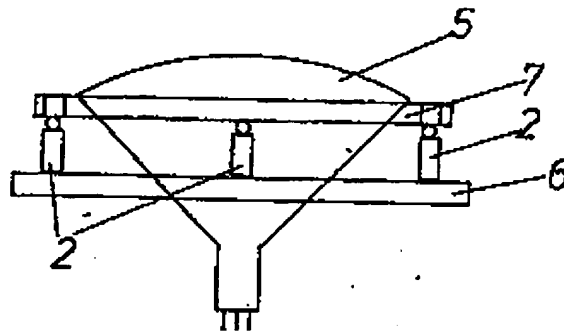# Handwriting tester
Claims

1. Handwriting tester characterized in that a plate (1) or a screen (5) is placed on several, preferably three or six, balance cells-load cells (2) such that the plate (1) or the supporting frame (7) is equipped with expansion strips (10) and that the three dimensional force and pressure strokes (8) that arise while writing on the plate (1) or on the screen (5) and are specific to the person and unchangeable can be dynamically detected by the balance cells-load cells (2) or by the strain-measuring strips (10) and can be translated into an electric signal and can be analyzed in an electronic circuit.

2. Handwriting tester according to claim 1 is characterized in that the plate (1) or the screen (5) is set into a solid covering (3) and that the plate (1) and the screen (5) can move freely with the supporting frame (7).

3. Handwriting tester, according to claims 1 and 2 is characterized in that depressions (4) are set into the solid frame.

4. Handwriting tester, according to one or more of the claims 1 to 3 is characterized in that forces that arise at a point can be processed in an electronic circuit.

5. Handwriting tester, according to one or more of the claims 1 to 4 is characterized in that the processed signals of the force and pressure strokes are stored in an electronic circuit and can be transferred to data storage, for example, onto a magnetic strip.

6. Handwriting tester, according to one or more of the claims 1 to 5, is characterized in that the information that is stored on the data storage, for example on a magnetic strip, and is read with a data reader, for example a magnetic strip reader, can be compared immediately with the force and pressure strokes that arise during writing and are analyzed in an electronic circuit.

7. Hand writing tester, according to one or more of the claims 1 to 6 is characterized in that when the analyzed force and pressure strokes correspond to the information saved in the data storage then additional functions can be rendered operative.

8. Handwriting tester, according to one or more of the claims 1 to 7 is characterized in that when the analyzed force and pressure strokes do not correspond to the information saved in the data storage then additional functions can be locked.
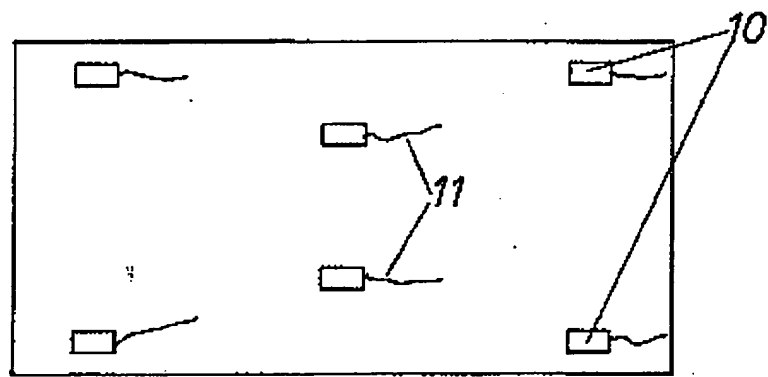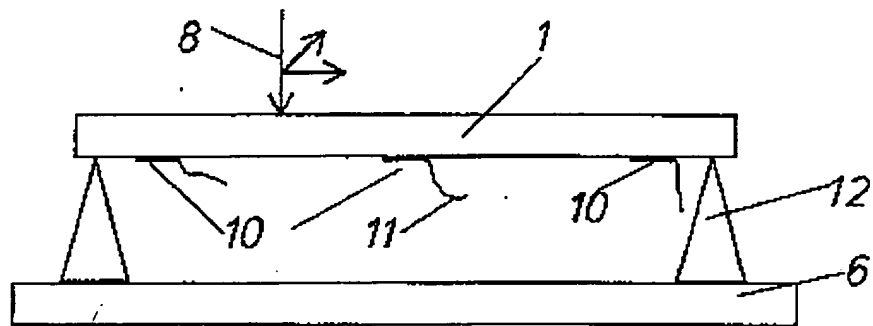
Example I
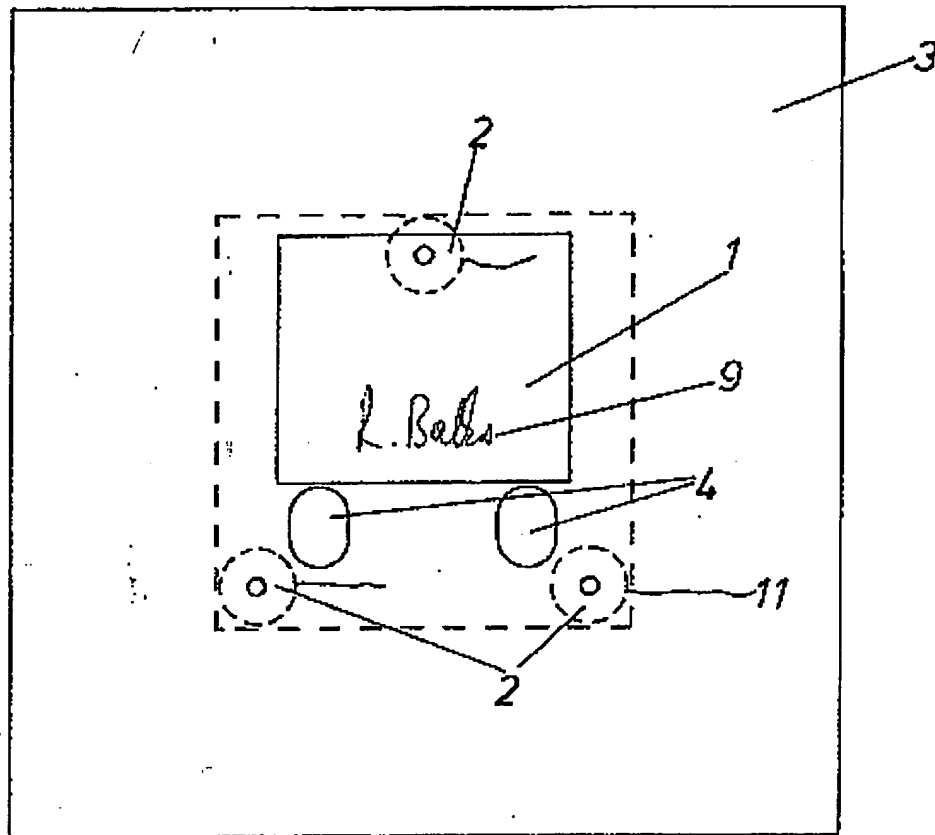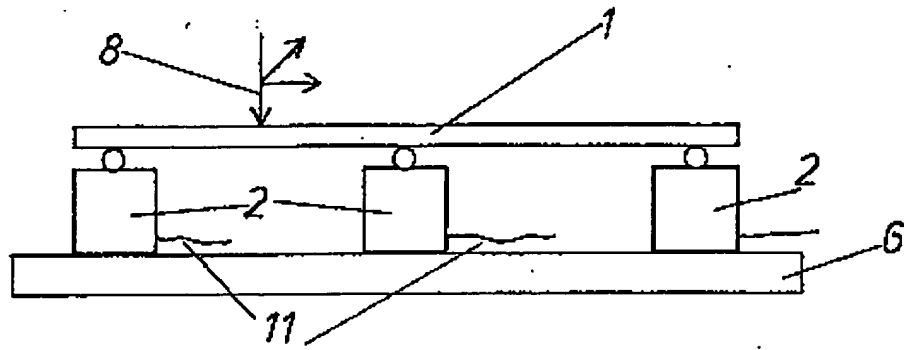
Example II

R. Balts 11.3.92

Example III

R.Balhus, 12.3.92